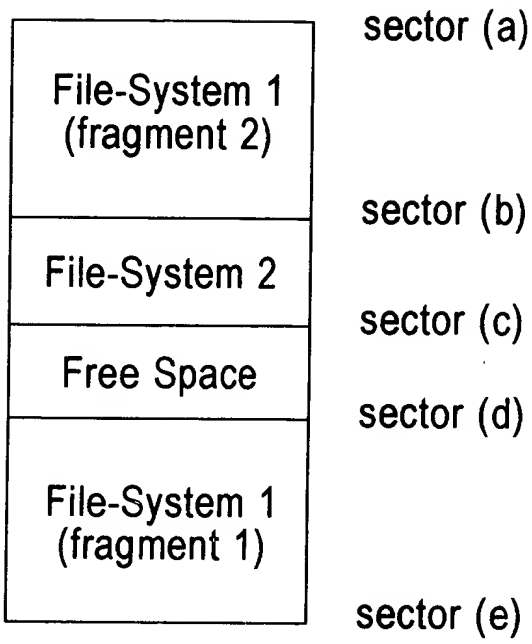
File-System 1
(fragment 2)
File-System 2
Free Space
File-System 1
(fragment 1)
sector (a)
sector (b)
sector (c)
sector (d)
sector (e)
flash bank "i"

Fig. 1

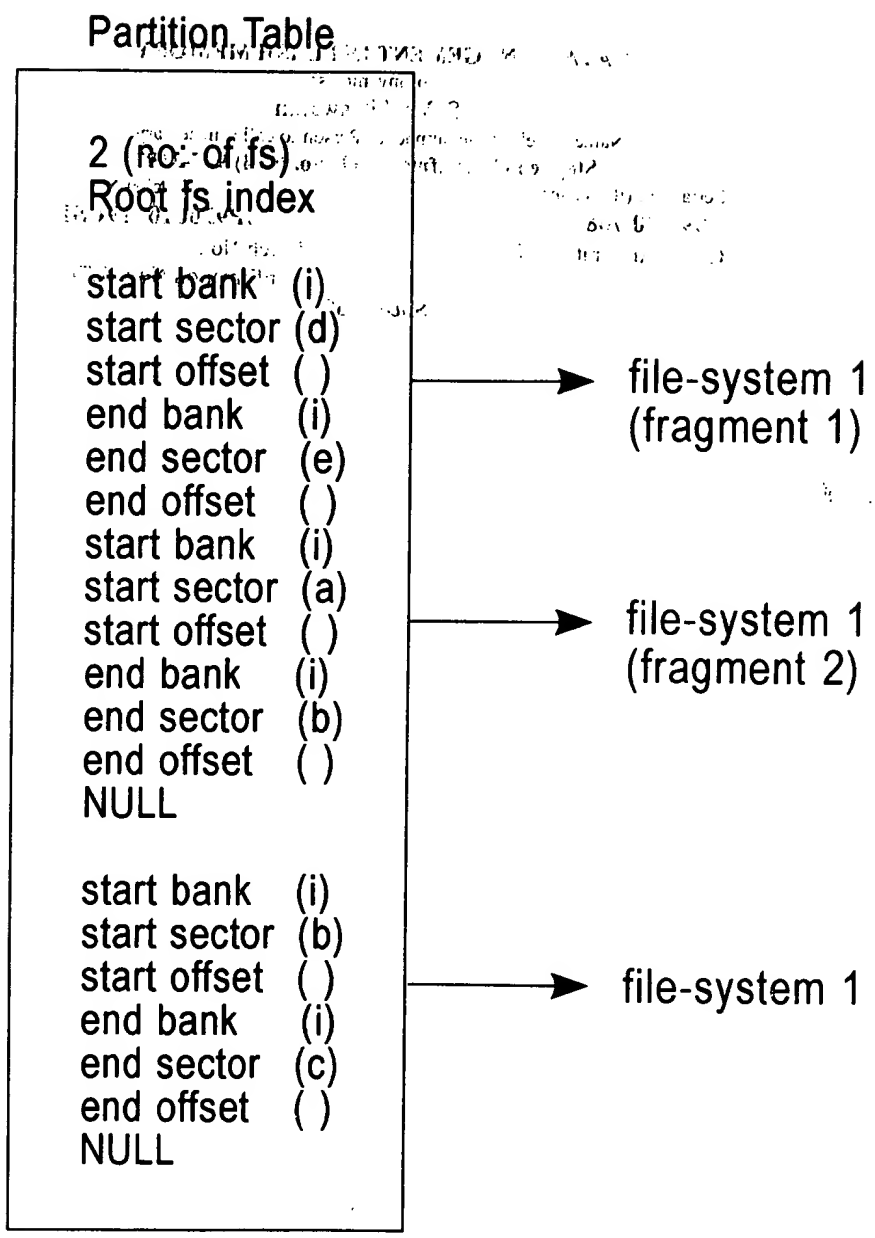
Partition Table
2 (no. of fs)
Root fs index
start bank (i)
start sector (d)
start offset ( )
end bank (i)
end sector (e)
end offset ( )
start bank (i)
start sector (a)
start offset ( )
end bank (i)
end sector (b)
end offset ( )
NULL
start bank (i)
start sector (b)
start offset ( )
end bank (i)
end sector (c)
end offset ( )
NULL
file-system 1
(fragment 1)
file-system 1
(fragment 2)
file-system 1

Fig. 2

Fig. 3A

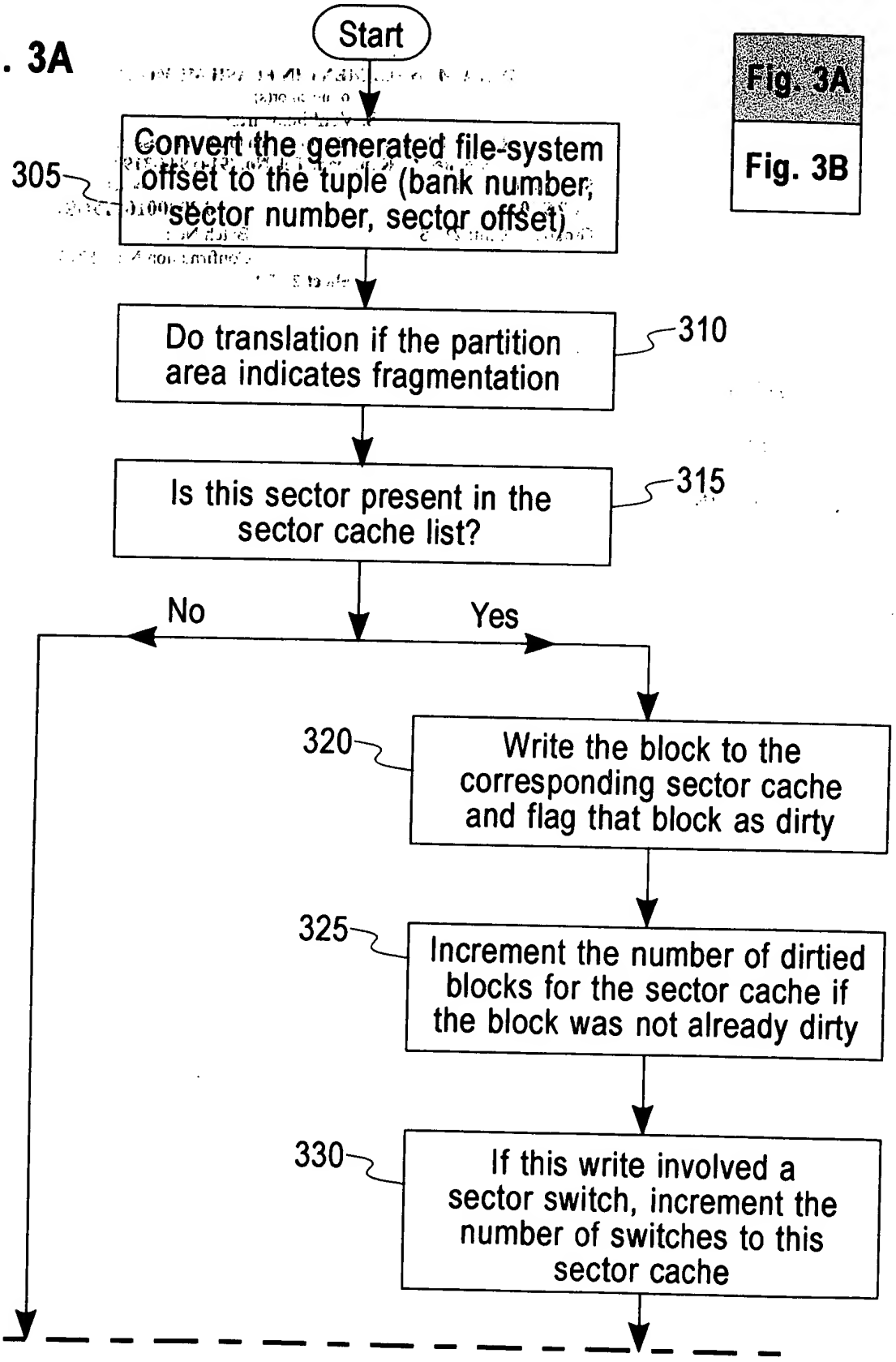

Fig. 3A

Fig. 3B

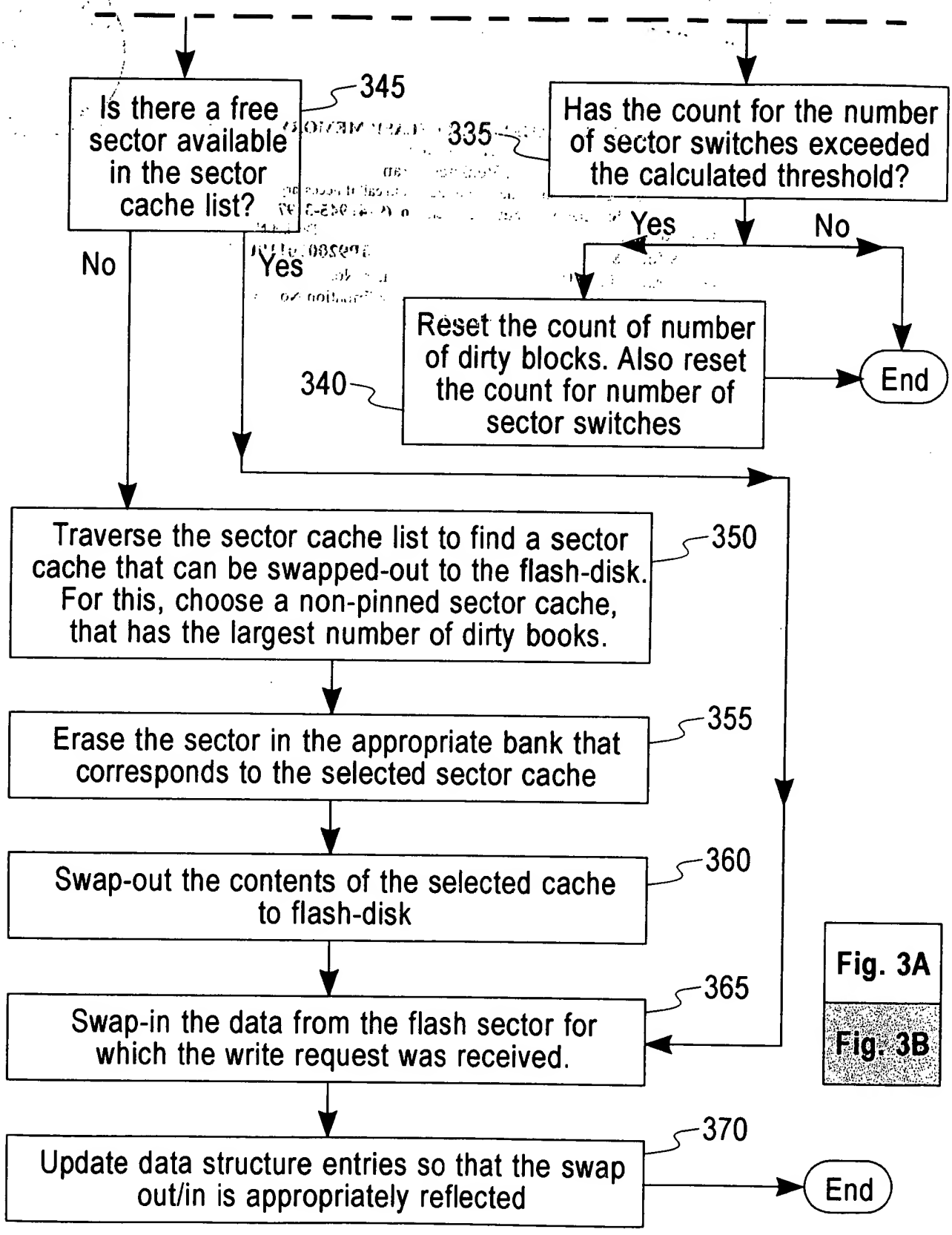

Fig. 3A

Fig. 3B

Fig. 3B

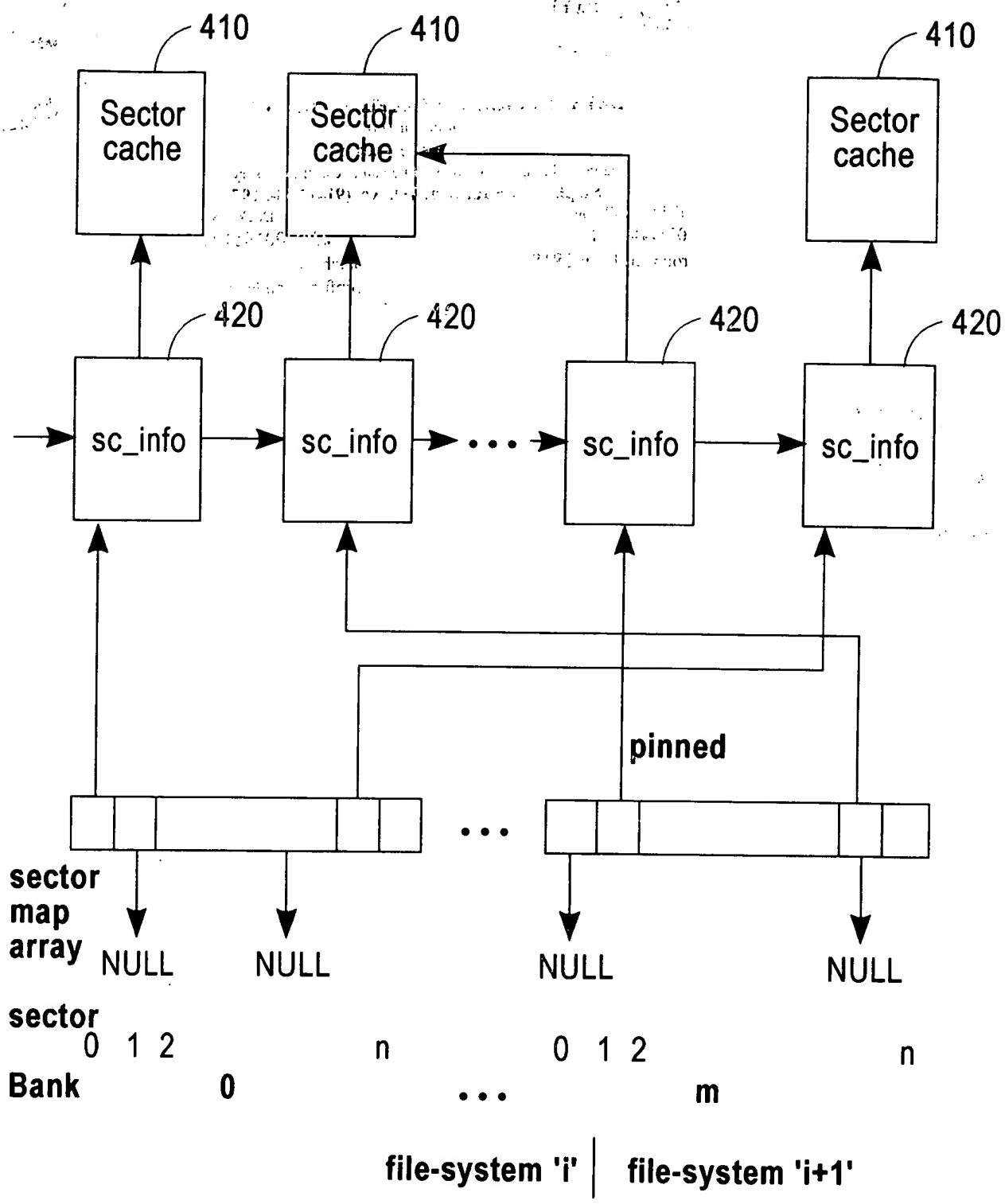
410
410
410
Sector cache
Sector cache
Sector cache
420
420
420
420
sc_info
sc_info
sc_info
sc_info
pinned
sector map array
NULL
NULL
NULL
NULL
sector
0 1 2
n
0 1 2
n
Bank
0
m
file-system 'i'
file-system 'i+1'

Fig. 4

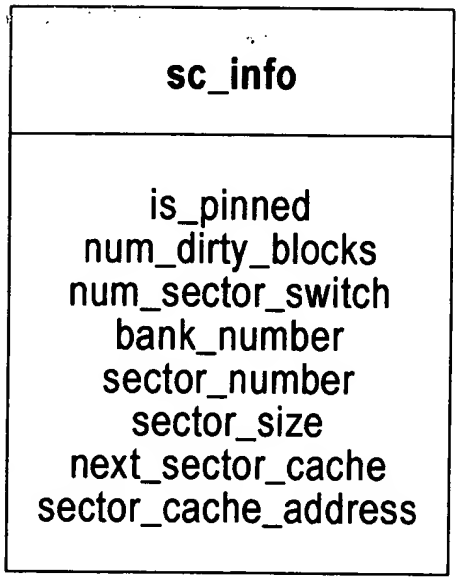
sc_info
is_pinned
num_dirty_blocks
num_sector_switch
bank_number
sector_number
sector_size
next_sector_cache
sector_cache_address

Fig. 5

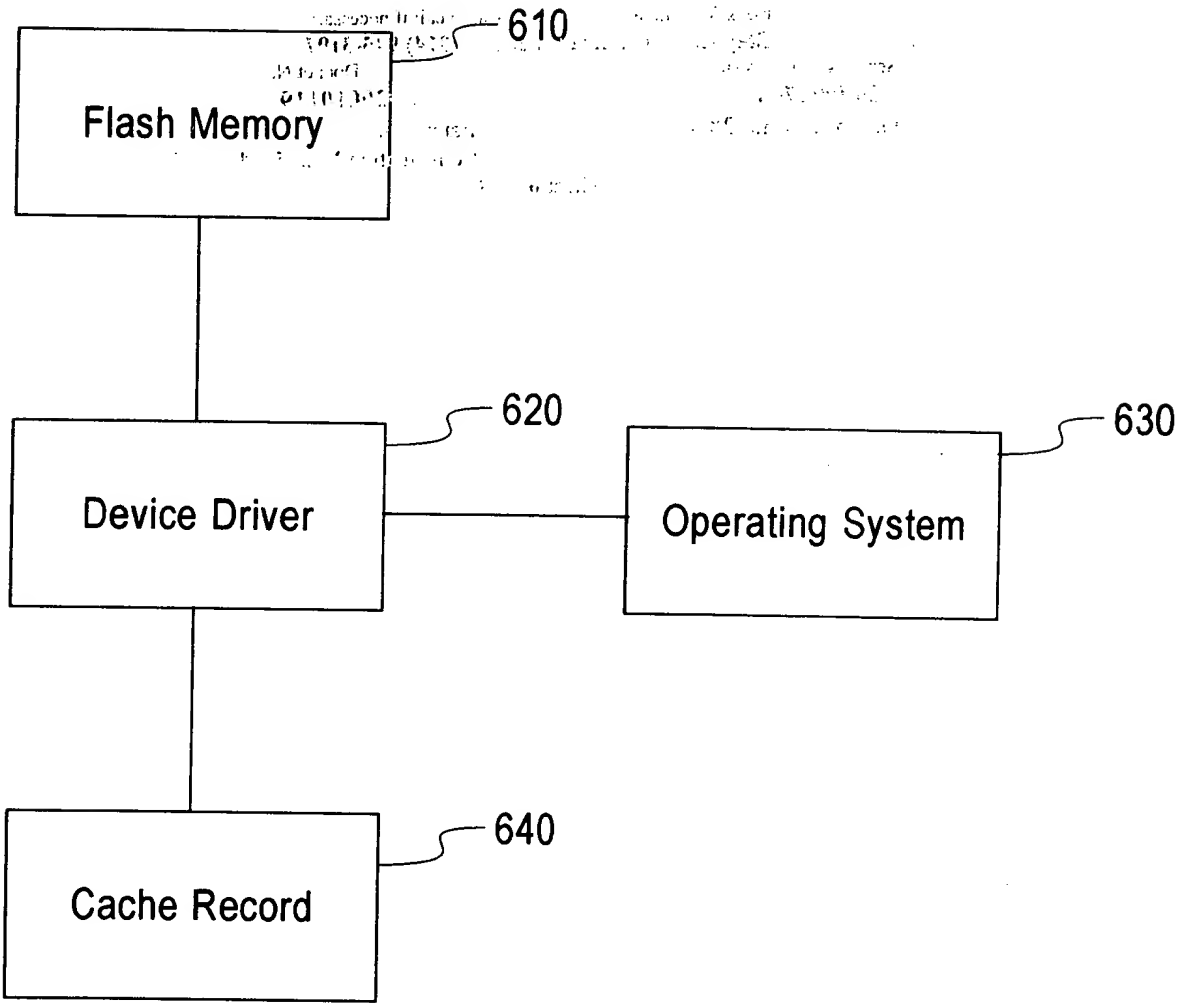
610
Flash Memory
620
Device Driver
630
Operating System
640
Cache Record

Fig. 6

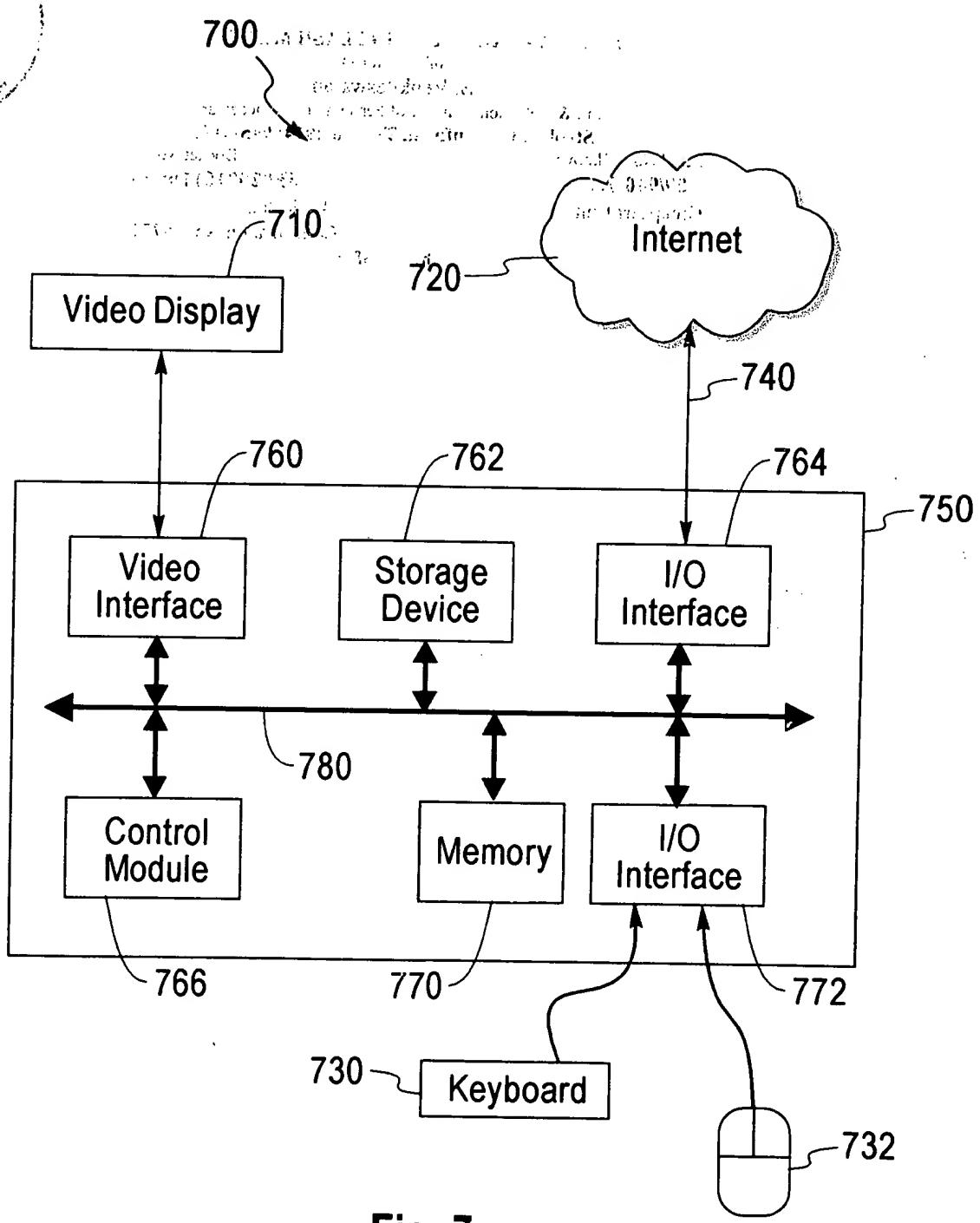
700
710
Video Display
720
Internet
740
760
762
764
750
Video Interface
Storage Device
I/O Interface
780
Control Module
Memory
I/O Interface
766
770
772
730
Keyboard
732

Fig. 7